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**POSTGRADUATE EDUCATION AND TRAINING IN BELGIUM:
THE CASE OF BUSINESS STUDIES
(Draft)**

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1. INTRODUCTION

This paper deals with the organisation of doctoral studies in three business fields¹ in one faculty of one university in Flanders. It does so largely through the eyes of 13 participants: 3 professors (1 per field), 9 doctoral students (3 per field), and 1 post-doctoral fellow (in finance and accounting).² Our material consists of documents as well as interviews with the participants, which lasted an hour each on the average.

Since 1991, the faculties have been organised on the basis of a number of *vakgroepen*: field-specific groups of researchers and/or teachers. As noted elsewhere, and in part also because of such organisational rearrangements, doctoral studies are in a stage of transition.³ However, doctoral students in Flanders are still typically temporary employees of the university.⁴ All the students work or worked under a 2-year contract, which can or could, at least in their perception, be easily extended at least twice. Initially, the extensions are for two 2-year periods, making a duration of 6 years the more or less formal completion time.⁵ Most participants stated that in practice a 7th and sometimes even an 8th year is added to complete the dissertation. Three doctoral students were in their 2nd or 3rd year; 3 in their 4th or 5th; and 3 were nearing completion or had recently completed the dissertation. Most of the participants were women: 1 of the 3 professors and 7 of the 10 students.

Being an ‘employed’ doctoral student, at least in practice, often also implies involvement in other, non- or less-research related tasks. This is largely teaching undergraduates. Most of the students in our study (8 of the 10) reported that they formally teach 50% of their time and do research for the remaining 50%. Two of these students reported teaching less than the others because, at least as self-reported, they were involved in other research projects, such as contract research. One of the students reported having no teaching tasks whatsoever.

While doctoral studies still typically proceed by learning-by-doing, it has been noted that in recent years some educational elements of the process of becoming a researcher have been increasingly formalised. This is the case across Europe, and Flanders is no exception. In the faculty under study, for example, doctoral students are obliged to participate in a doctoral training programme. They have to pass the programme ‘with honours’, which entitles them legally to use the title of *doctorandus*.⁶ From then on, dissertation research begins in earnest.

¹ Marketing, organisational and strategic management, and finance and accounting.

² For the sake of convenience, the term “students” will be used for the doctoral students as well as the post-doctoral fellow, who had obtained his doctoral degree in 1995 in the same institution.

³ See, for example, the Flemish policy paper.

⁴ The exception, here, concerns so-called ‘bursary’ doctoral students paid for by the Research Council. At present, there are no such doctoral students in this faculty; and one professor recalled that there were “2 or 3 of them in the past decade or so”.

⁵ Within the faculty under study, participants often refer to this as a “2-4-6-contract”.

⁶ Literally, one who is becoming a doctor.

The structure of the present paper is as follows. In the next section, we will discuss access to doctoral studies, the numbers of doctoral students in the faculty under study, and the selection processor processes involved in admission. The third section will deal with the obligatory doctoral training programme and the fourth with the tasks doctoral students must do. The fifth section will present issues related to the supervision and evaluation of doctoral students and the sixth, the duration of the programme and the career prospects of doctoral students. The seventh and final section concludes the paper.

2. ACCESS

In this section, we discuss the numbers of doctoral students at the faculty level as well as the ways in which people become doctoral students, the conditions they have to meet, and their reasons for doing a doctorate.

2.1 Numbers of doctoral students

In the following table, we have compiled data regarding the numbers of doctoral students in business economics. We give, first, the number of new enrolments in the doctoral programme in the last few academic years; second, the number of students successfully completed the programme per calendar year; and third, the number of doctoral degrees awarded in recent calendar years.

Table 1: Numbers of students enrolled in the business doctoral programme at this university, numbers of students passing the exams, and number of doctoral degrees awarded

	Number of new enrolments	Number who passed the exams	Number degrees awarded
1989		8	
1990		3	1
1991		7	2
1992		6	3
1993	9	3	2
1994	9	3	1
1995	9	2	4
1996		5	

For the number of new enrolments: 1993=1993-94, etc.

Source: The Faculty Secretariat

These numbers are admittedly small. The number of new enrolments in the doctoral training programme is small to begin with, so, given the dropping out that is likely to occur, the number of individuals successfully completing the programme and actually obtaining a PhD is even smaller. Regarding dropping out, both the students and the professors reported that this happened most often after about one or two years. They indicated also that, in the main, two types of potential doctoral candidates are involved. First, individuals who entered as assistants who were evaluated as ‘insufficient’ or whose ambitions and professional orientation shifted. Second, some try to combine a job in the private economy with doctoral

studies. According to the participants, this second type of potential candidate rarely if ever succeeds in obtaining a doctoral degree. Most often they do not even finish the doctoral training programme. Thus, while formally there is a possibility that non-employees of the local institution may earn a doctoral degree, this is perceived to be, to use the words of one professor in marketing, “more a theoretical possibility than something that actually occurs in reality”. And a professor in management pointed out that it is “virtually undoable to combine work in a company with family life and doctoral studies”.

To say that the number of doctoral students in business studies in this particular faculty is small is, of course, a comparative statement. There are two comparisons we have in mind. First, the number of doctoral students within the natural sciences and engineering is many times the number we find here. The number also appears small when compared to the large number of undergraduate students in business and economics. This can also be viewed as being reflected in the teaching duties doctoral students have, as noted above in the introduction. Regarding this, one could expect, for example, the relative attractiveness of external – that is, non-academic – labour markets to play a role here in terms of earnings and career prospects. While this indeed seems to be the case, i.e., many participants report that most students choose to work in the private economy instead of within the university system, they also point out that more factors are at work. The first of them has to do with one formal condition one has to meet in order to become a doctoral student: one has to graduate with honours from one’s undergraduate university study. So, to use the words of one doctoral student in finance and accounting “There’s a number of people who do not graduate with honours, so they do not qualify for doctoral studies. They go elsewhere.” Second, the work associated with the doctoral programme is also important, particularly the large teaching load. The previous participant, for example, went on to state: “And then there are a number of people who have no commitment to teaching whatsoever. So they either apply for a research project, in which they can do research full-time, or they go to work elsewhere.”

With regard to the attractiveness of pursuing a career in the private economy, it is often pointed out that longer term prospects and earnings in particular may be crucial to individual decision making in relation, for example, to the perception that the possibility of an academic career is dubious at best. When beginning a career, salaries in the university and the private economy are perceived to be comparable, and the salaries of doctoral students are often perceived to be ‘good’ and sometimes even ‘very good’.

The way in which university research is funded can be viewed as having an effect as well, for example, in terms of the number of doctoral-study positions available within the university budget. Doctoral students doing full-time research are reported to be rare, and then they are funded by the National Fund for Scientific Research (NFWO) on the basis of a research proposal. There are no reports of doctoral students in this faculty being financed by contract research.

2.2 The selection process

When considering how the participants became doctoral students, it is interesting to note that the most of the students (7 of the 10) stated that they had been asked by a professor to apply for the position of assistant. This was the case in all the fields. Most of the doctoral students are reported to have done their basic study in the same institution. In a few cases, doctoral students had expressed an interest in such a position. One doctoral student in marketing, for example, pointed out that:

I was asked by [a professor]. I had mentioned earlier that I wanted to stay here, so I quickly said: “yes”. A number of positions became available in a number of fields. There was also a position open in a research project. I started with it, and did that for 18 months before becoming an assistant.

The point made by this participant is not uncommon: 5 out of the 10 students reported a time gap between finishing their basic studies and beginning work as an assistant, i.e., beginning their

doctoral work. Three of them were involved in research projects, among them the previous participant. One had studied abroad, and the other had worked for a consulting firm. Moreover, one participant reported an interruption once he had started his doctoral programme because of military service.

The application procedure itself is a legal obligation. Within the faculty under study, a standard form has to be filled in consisting, basically, of one's *curriculum vitae*. Then one has to be interviewed by the application committee. That one has been asked to apply does not necessarily mean that one gets the position for there may be other applicants as well. The committee ranks the candidates. This decision has to be confirmed by various administrative bodies within the faculty and the university. Some of the participants stated they had been ranked 2nd or 3rd in their particular procedures but were appointed because the higher ranked applicants had chosen to work elsewhere. Sometimes the latter went to work on other university positions. For example, 3 students stated they had been accepted for a number of doctoral-study positions in different groups and fields and had simply chosen the one they, at that particular time, liked best.

In relation to the reasons mentioned for becoming a doctoral student, some students stated they had an interest in, and were committed to, teaching. For them, at least in some sense, research comes as a pleasant diversion. One student, for example, pointed out: "I'd like to teach, but I would not like to teach all the time. Eventually, one teaches the same thing over and over. Research is something different."

Half of the students indicated that they, at that time, wanted to continue in research. A few others reported that they were ambivalent about working within a university and had worked, or solicited for jobs, elsewhere before commencing their doctoral studies. Although many students further on in their academic career indicated that, at the time of application, they were largely unaware of what doctoral studies really involved in their particular faculty, they all reported that they liked to work at the university very much. They did so primarily in terms of their self-perceived independence. One student, for example, stated: "Apart from the obligations one naturally has, one is one's own boss, so to speak. One has to be in the office regularly, of course, but one can work at home if one wants to.... In my opinion, a university position is ideal for combining work and family life." Another student spoke of a "luxurious situation" in the faculty, and does did also comparatively, that is, based on what this participant "has seen and heard of other institutions in Belgium and abroad".

Insofar as the motivation for the choice of becoming a doctoral student, however, these evaluations of students come in retrospect, i.e., after a varying number of years of experience. More prospectively, these evaluations touch on the issue of career prospects or professional desires and ambitions. We will discuss this below in Section 6.

3. THE DOCTORAL TRAINING PROGRAMME

Once accepted as a doctoral student ('*assistant*'), one is obliged to participate in the doctoral training programme, which the faculty started in the early 1980s. Moreover, one has to pass the programme's examinations also 'with honours' in order to be allowed to work on the dissertation. As such, this can then be viewed as the second, formal condition doctoral students have to meet. During the programme, a tutor supervises them.

In principle, it is possible to be exempted from the programme or from one or more of its parts, depending on one's previous training. The faculty's doctoral committee decides whether or not to grant the exemption. One professor described it as follows:

One has to put forward evidence of training that we view as equivalent to our doctoral programme. If one has obtained a Masters degree, we think one is mature

enough to start dissertation research right away. Earlier this assumption was not made; everybody formally had to do our programme. When we looked at the content of the degree, we often concluded they could be exempted from nearly the entirety of the programme. So to avoid the administrative burden of this process, we decided to give Masters degree holders direct access to the doctorate.

Nine out of the 10 students reported that they had done the full programme, or to have done so in the cases in which the participants have completed it. The one exception – who, indeed, did have a Masters degree – stated that a portion of the programme had to be done in the early 1990s, so the word ‘earlier’ in the citation above refers to very recent practice.

3.1 Duration

While designed to be a 2-year (half-time) study programme, the students considered it unrealistic to finish the programme within that period of time. In practice, they reported, the actual duration is closer to 3 than 2 years. This is primarily because of their teaching duties, which sometimes interferes with attending a course at a particular time. It is a matter of the ‘timing’ of the programme. To use the words of one student in management:

The timing is more or less fixed; though this is now more so than before. For example, when I did the programme, there was some flexibility. But now it is more like this: you have to do the courses in your 1st year and to present your research paper at the end of the 2nd year.

But, concerning participants’ present (and recent) actual length of completion, this student went on to argue that “There are only a few people finishing the programme in 2 years. Mostly it is 3 years; sometimes 4. If you teach you teach, and you can’t do something else.” A doctoral student in finance and accounting, for example, reported her 2 ½ -year duration to be “comparatively fast”, partly because “before I became an *assistant*, I worked on a temporary research contract. I requested, and was granted, permission to start already with the doctoral programme. So in my first year I already could do a number of things for the programme.” Two other doctoral students also reported ‘earlier’ access to the training programme, which affected the completion time since the formal commencement of the degree programme doctoral is used as the criterion.

3.2 The structure of the training programme

According to the faculty’s present regulations, a doctoral student has to ‘collect’ a total number of 60 ‘study points’. One such point equals 30 hours work. In the main, the programme consists of 3 parts: (1) a number of courses; (2) an examination on the literature; and (3) a series of seminars, for one of which one has to prepare a research paper and present it to an audience of both staff and doctoral students.

3.2.1 The courses

Basically, there are two types of course that doctoral students attend or attended: required courses and elective courses, which can be chosen either from a number of courses offered within the faculty or from courses offered elsewhere. In the latter case, one has to request formal approval by the doctoral committee.

Nine students reported having or having had to do 3 required courses. These courses are reported to be in the main quantitatively and methodologically oriented. Precisely what courses

doctoral students have or had to take differs somewhat among the students, depending on the stage of their studies. In other words, the kinds of courses taught has changed over the past 6 or 7 years. That is, whereas nowadays research methodology, econometrics, and microeconomics are required courses, the doctoral students further in their career said they had had to take courses on research methodology, data analysis, and linear and/or non-linear programming.

The students also reported attending or having attended 3 elective courses. The more senior of the students (at least in terms of professional age) reported having selected 3 courses from a list offered by the University.⁷ The students who are still completing the programme or who recently finished it reported that, next to the list of courses to choose from, they themselves could suggest courses to take. That is, after consultation with (and, to some extent at least, after approval) of the suggestion by one's tutor, one requests permission to take a particular course from the doctoral committee. Three students said they had done this. Half of the students report having taken one or more MBA courses offered by the faculty in its MBA programme.

That the students took or are taking their elective courses primarily within the same faculty is primarily for practical reasons. The possibility of taking 'external' courses as individually judged in the light of the time and effort one is able and willing to invest, that is, as influenced by one's task-setting, the 'timing' of the course at hand, and so forth. One student in management, for example, pointed out that

It is not always that convenient to do external courses because of the time that it would take and because of one's other duties. This is why the most people choose from what is offered here. This may also be because one is not as yet clearly specified in the doctoral programme what the dissertation will be about. So one tries to finish the courses as quickly as possible.

For the manner in which doctoral students' course activities are formally evaluated, the student's said there are three ways. First, there is, in the words of one student, "the classic examination", in which one is confronted with a number of questions to answer. Second, there is the writing of a course paper. Third, there is a form of examination in between the first two: the 'take-home test'. In this case one is given some questions that one has up to three weeks to answer. The results are defended and discussed by the group of course participants. The manner of evaluation, all students' report, depends wholly on the individual professor.

3.2.2 Test over independent reading

The second part of the doctoral training programme concerns an examination on the literature. Here, too, we find a distinction between the 'younger' and 'older' doctoral students. The former said they took one specific literature examination relating to their field of choice ('marketing', 'finance', and so forth). The students further in their career reported having taken 2 such examinations; one field-specific and one general. But, in either case, it is reported that standard lists containing the literature to be studied were and are available. The form of the examination (i.e., writing a paper or do an oral exam) again depended wholly on the professor in charge.

3.2.3 The seminars

Seminars within the faculty are colloquium-like settings in which recent research work of both the staff and doctoral students is discussed. From within the framework of the doctoral training programme, the seminars are relevant to doctoral students in two ways. First, they are obliged to attend and actively participate in 10 seminar sessions. Over the entire academic year and with

⁷ If one looks at the present schedule (as published in the Faculty Regulations regarding the doctoral training programme and the doctorate), one finds that the courses mentioned there are the same as most of the obligatory courses the 'older' doctoral students said they had to follow.

holidays taken into account, the seminars work out to once every month. However, the students pointed out that the seminars are actually organised from late February until June, as one student said, “in that period of time the seminars take place practically every week: Wednesdays, 15:00 hrs”. Second, a research paper has to be written by doctoral students and presented at one of the seminar sessions. This paper is often reported to be about one’s choice of dissertation subject. In this sense, it can be thought of as a kind of preliminary research proposal.

3.3 Students’ evaluation of the programme

When we asked the students’ to evaluate the programme, almost every student offered comments, some positive, some negative, some specifically regarding one part of the programme, and some regarding the programme as a whole. For example, one student in management was positive about most of the doctoral training programme, but nevertheless added that “It is obvious that there is something wrong with a programme that practically changes every year and that has radically changed 2 or 3 years ago.” In this particular participant’s analysis, there are two related issues involved:

The problem of the programme is, first, its heterogeneity. Thus, for example, general and business economists attend the same courses. Second, there is the expectation of the doctoral students regarding the programme. They expect to be actively coached towards their dissertation work but instead encounter quite a broad training programme. One learns a number of things in the course of the programme, but 50 or 60% of that one will never use anymore. But the faculty position is: “one has to do that in order to obtain the PhD.

All the participants readily acknowledged the last point made here. One professor, for example, stated that “we think that, since one becomes a doctor in the applied economic sciences, one’s training should go beyond the particular subject one writes a thesis on.”

The point about heterogeneity is readily acknowledged as well. While often understood as powerfully influenced by the smallness of the home institution, many students pointed out this may affect the content or the level of a course as well. One student, for example, noted that

The problem is that, in regard to the courses, no distinction is made between people doing business economics and those doing general economics. Thus, for example, if one looks at the course on econometrics, there were people present, amongst whom myself, who had not done anything on econometrics before. But there were also people who had. So for the professor it is terribly difficult to design a course that is useful to both groups.

And, in regard to a course on research methodology,

This course was superficial in the sense that we were given only an overview of a number of methodologies. There was no further deepening. We were told: “if you want to know more about this, you can take a look at this or that for further information.

It is primarily because of the programme’s generality and broadness and the heterogeneity of the doctoral students themselves, that students take a more ambiguous stance toward the programme than the professor quoted above. In fact, only one student was very positive about the programme. This is obvious, first, because of the perception that “One simply needs some of the things offered” and that “it may have to do also with the fact that I am mathematically oriented.”

Recall, in this regard, the reported dominance of quantitative work within the programme. But, in this participant’s perception, there is also a third important element underlying his positive evaluation, namely this:

The doctorate is ultimately a kind of test one takes in order to be taken seriously by one's peers. So one has to know what the norm is.... One has to know also the atmosphere: economics *is* mathematical.⁸ I think this is conveyed well during the required courses. Apart from the content, these courses also convey a certain mentality.

Insofar as students' expectations regarding the programme are concerned, these are indeed, at least in retrospect, often phrased in terms of the 'use' of the programme for their current work. This is why they generally evaluated the field-specific literature examination and the research paper as the most positive parts of the programme. This is also why most of their criticism was of the required courses. One student, for example, when reflecting upon one particular course on linear programming, pointed out that "to this very day, I have never seen the use of this course. I can imagine that it is useful if one is in logistics, or in transport. But not in my field."

This perceived field-specificity of methodologies was mentioned more often. Another student, when reflecting on a course on econometrics, indicated that "in my field, if at all, only the very simplest of econometric models are used; certainly not ones that require advanced mathematics or statistics."

That the point of an ill-relatedness of the contents of required courses and one's own dissertation (as perceived) can be made especially in retrospect is, of course, because the process of choosing a dissertation subject occurs later in the programme. One participant neatly illustrated this when reflecting on a course on microeconomics:

At the time I did the course, I thought: what am I doing this for? I am never going to use this. But now that I know my subject more broadly, I look at it differently. My subject includes a game-theoretical element, and game theory was part of the course. So whenever I now read an article that involves game theory, I understand more of it than would have been the case if I had not taken the course.

In addition to being directed primarily at the required courses, the students' criticism was also directed at the obligation to participate in 10 seminar sessions. While their evaluation concerning the writing and presentation of their own research papers was generally positive, it was less so about attendance at other people's presentations. We have already indicated the 'timing' of the seminar sessions to play a role here. But 'broadness' and 'heterogeneity' were also mentioned in this particular case as well. One student, for example, pointed out that

The one time the session is about marketing and the next time about micro- or macroeconomics, or whatever. So largely it deals with subjects that are almost completely unrelated to one's own research. But people do expect active participation, so one has to read the paper very carefully and perhaps to collect some additional information oneself. And that takes a lot of time.

4. THE TASKS OF THE DOCTORAL STUDENT

⁸ Participant's emphasis.

In the main, doctoral students carry out three types of work: teaching, research, and other tasks.⁹ In the last case, for example, may involve representation in formal administrative or decision-making bodies.

4.1 Teaching

As already noted in the introduction, the majority of the students reported a significant teaching load: for 8 out of the 10 students, about 50% of their time. This is also their formal teaching time as specified in their contract. In practice, however, the teaching load of individual students varies somewhat along basically two dimensions: what and how they precisely teach and where they are in their doctoral career. In regard to the first dimension, one source of differences between individuals stems from the particular courses doctoral students are involved in and the way in which they are organised. There is the factor of the ‘popularity’ of these courses among undergraduates, for example, in relation to the number of staff members available to teach. In this light, 3 student stated that they knew cases in which current cutbacks in the university budgets as perceived entail practices in which there is actually a shortage of teaching staff. To use the words of one student in management, “it is in fact the case that, in such a situation, one’s teaching duties exceed 50%, at the expense, of course, of one’s research work. I know this happens.”

Individual ratios such as these, of course, may vary from year to year. The recent introduction of the ‘semester’ as the organising entity in teaching is mentioned as an influence as well. The introduction of the *vakgroep* may also affect upon one’s teaching load. One student stated that

Until recently, a doctoral student was linked to a professor in terms of teaching. But with the system of a *vakgroep*, which has been introduced recently, this will probably change. It has to also do with flexibility so one can teach in areas in which there is a shortage of staff at a given time.

When broadly conceived, students’ work in the realm of teaching involves 2 kinds of activity: first, the teaching itself (and all that comes with it, i.e., preparation, evaluation, and course development); and, second, supervising undergraduate students individually in the process of writing an undergraduate thesis. Regarding the latter, doctoral students are allowed to supervise students individually from their 3rd year onwards. Seven doctoral students reported that they did so; the 2 other doctoral students, given their ‘early’ stage, said that they would do so the coming year. With regard to the former, the majority of students reported teaching a group of 30 to 40 students in seminar-like sessions and/or supervising 3 or 4 students in completing a number of ‘assignments’. Organisationally, these two teaching settings are linked to a series of lectures performed by a professor. Doctoral students may replace the professor in a lecture when he or she is ill, or otherwise absent. This, however, is reported to happen very rarely. Many doctoral students also report that

⁹ This is, of course, a somewhat arbitrary division. It also deviates from the formal faculty’s divisions. For example, whereas we count individually supervising undergraduate students as ‘teaching’, within the faculty it counts as ‘service to the faculty’. We acknowledge that in fields with a high degree of interaction between teaching and research – e.g., in terms of the intimate connection between undergraduate and graduate research, as often found in engineering, and the natural and life sciences – this task may just as easily count as ‘research’. At least, participants in the natural sciences often view it as such. Often, for example, advanced undergraduate students conduct measurements for their supervisor, a doctoral student. That is to say that the work of the undergraduate student has to fit in the work of the doctoral student at hand. In other words, business studies is not portrayed as a team-based activity. In the case of the local university-based field-specific (research and teaching) group under study, there is hardly any connection between the undergraduate student’s work and his or her supervisor. This is so along two dimensions. First, there are no reports of an ‘intimate’ relation between doctoral students’ own undergraduate research and the research they are currently engaged in as a doctoral student. Second, from the perspective of supervision, only one doctoral student, in finance and accounting, stated that “I have to be able to use it [undergraduate research work] for my own work, for otherwise it’s not worth the time and effort”.

they carry out activities that can be viewed as supportive to teaching, such as course development (e.g., updating course literature), correcting undergraduate students' examinations, and monitoring while students take their examinations.

While for research, as we have seen, some aspects of the learning processes have increasingly been formalised over the past one or two decades (e.g., in this study, the doctoral training programme), it is interesting to note that this is not at all the case for teaching. Doctoral students, in other words, simply begin to teach without any formal training. Necessarily, they first and foremost build on their own experience and that of others:

There is no programme to learn to teach. One learns from one's own experiences in the past. One learns from other people's experiences; they sometimes give unsolicited advice. And naturally you can always ask someone: how do I do that?

4.2 Research

We have seen that the process of choice of research subject can be situated in the final stage of the doctoral training programme. In most of the cases, the students reported working along the lines written up in the research paper. When viewed as an organisational goal, then, it is often met. One professor, in this regard, pointed out that "Usually, one does not write a research paper on subject A and obtains a doctorate in subject B. It's possible, of course, but then it starts to look like one has lost time."

Thus, while one hopes this stage of the research process proceeds in this manner, it does not always do so, of course. One doctoral student in marketing, for example, when reflecting on this, said that

This is the ideal situation: that one's research paper is a part of one's dissertation. In my case this was not so, and this happens often. When starting the work for the paper, one thinks: "this [subject] looks like something to get a PhD with". Subsequently, one does all the preliminary work and may put it all down in the research paper. And after that one realises that "This isn't it", "I don't want to do this for another 3½ years", or that it isn't that interesting, or do-able, or whatever. In sum, one sees all kinds of difficulties that make one decide to look for something else.

Though often not as drastic as in the case of this participant, other students report that they too had difficulties in choosing a subject, and two, in addition to the one just cited, reported a shift in the domain within which a subject was sought. Many others commented on difficulties in terms of the time and effort invested in the process and pointed out that it has to be done alongside their other duties and that is primarily has to be done alone.

Once the subject, broadly conceived, has been selected, the research tasks of doctoral students can be viewed as consisting basically of 3 tasks: (1) designing and doing the research; (2) presenting results at seminars, colloquia, conferences, and the like; and (3) writing up the research (e.g., in the form of the dissertation, or a journal article, conference paper, and the like).

4.2.1 Designing and doing the research

Independently of the speciality they were involved in, all the participants stated that research in economics is a highly individual endeavour. This is to say that, albeit in consultation with one's supervisor, one does all the work oneself; from the choice of subject and its further specification to actually doing the research. This influences the sense of 'independence' expressed by all participants, which is highly valued, although not devoid of some perceived 'negative' aspects, as we will see below.

If the research paper from the doctoral training programme can be considered as a preliminary research proposal, the more formal research proposal is the provisional end product of the design process. We know this often builds further on one's research paper, albeit in a more elaborate and 'practical' way. One student reflected upon this design process in the following terms:

I began with [the marking off of] the subject's boundaries. What will my research be about precisely? Is it do-able? What kinds of data do I need, and what kinds of data are available? This is very important. Then I proposed a methodology: what kind of model will I use to research my questions?

The proposal, after having been approved by one's supervisor, is sent to the doctoral committee for approval. Once approved by this committee, one continues, in the words of this participant, "to further elaborate and solve problems".

These problems may be of various kinds. Some have to do with the further positioning of one's work vis-à-vis the research literature in a particular field or even on a particular subject. The students reported putting a great deal of effort into the literature search. Without exception it is perceived to be fundamental, particularly in the design process. A management student, for example, stated:

Management is not a science, which entails the fact that a lot of contradictory things have been written and published. It takes a lot of work and effort to acquire an insight into how this works and what view one can defend and base one's PhD research on.

Another problem often mentioned by the students concerns the processes of data collection, such as the preliminary research into the availability and usability of certain kinds of data. One student in marketing, for example, pointed out that:

In my case it was very difficult to find a suitable data set. That has to do also with the difficulty of getting certain kinds of information in Belgium. I lost a lot of time in this process: making proposals, contacting companies, and so forth. Eventually, when the time started to press, I decided to set up an experiment myself in order to get data.

While this is an extreme case – in the sense that this student, based on and experienced difficulties, decided to 'self-construct' data instead of using existing data constructions (e.g., annual reports) – many other students identify similar problems within the research-design process. One student in management, for example, framed the difficulty of data collection partly in terms of the differences between quantitative and qualitative research:

I'll write a more qualitative thesis. The biggest problem with that is data collection. That is to say that it takes more time than when departing from something quantitative. A second problem is that people here sort of expect that one to come with a model. Qualitative models, in some ways at least, are more difficult than quantitative ones.

A student in finance and accounting reported something similar:

What goes on in my area is usually very mathematical. I would like to build in something like that but in a more qualitative way, for example, it would also be based on interviews with the people responsible for the information that I research.

It is interesting to observe that despite a self-perceived dominance of quantitative research (e.g. in orientation and methodologies) at the level of both the faculty and the scientific field, half of the participants express an interest in qualitative research and methodology and reported "building" qualitative aspects into their own research, as the participant just cited. For many participants here,

this implies practical hurdles to be overcome, such as the difficulties in collecting data. These reports often point to the time and energy invested in the process, which is perceived to be far more than for quantitative work. The latter line of work has, at least as often perceived, the ‘practical advantage’ (e.g., in terms of time consumption) of data availability. Moreover, it is *readily* available, that is, it is being increasingly published on CD-ROM and on the Internet. In other words, quantitative research works – to a degree at least, and perhaps increasingly due to the influence of information technology – can be carried out at one’s desk, so to speak.

These kinds of perceived differences notwithstanding, participants from both lines stress the individuality of research work. While this is known to be a major characteristic of much of social scientific work at the level of scientific field – as opposed to science as a team-based activity in much of the natural sciences and engineering – the participants indicate that the sense of individuality of work is also a local characteristic, i.e., of the particular institution the participants are part of. One student in finance and accounting, for example, pointed out that

if one likes to do one’s own thing, so to speak, one has to be here in this institution, for it gives you the liberty to do so; if one likes to contribute to a system that is already at work, one has to go to [name other Flanders university].

The local situation is often explained in terms of the specific history of the institution: it used to be a *Hogeschool*¹⁰ and has relatively recently acquired university status. It is, therefore, at least when referring to its research base, a very small institution.

4.2.2 Oral presentations

To present one’s research work orally is a part of scientific life in every field and business studies are no exception. And, as in any other science, a system of conferences is one important framework in which researchers in economics present their work. This implies, of course, that there is some work (i.e., research results and interpretations based on these results) to present. In this regard, one would expect visits to conferences to occur only in the course of the preparation of the dissertation. This is reported to be predominantly the case with two exceptions. A recent faculty financial policy change enables newly appointed doctoral students to attend international conferences. In these 3 cases, it is reported to be part of the process of choosing a subject: one can ‘look around’, find out what’s there, and talk to people. The other ‘exception’ refers to the 5 students who are, or have been, working as contract researchers prior to enrolling in the doctoral programme. In these cases, attending a conference is reported to be a normal part of one’s work. Within the formal framework of the doctoral programme study in this institution it is indeed likely that one will attend conferences primarily in the course of one’s doctoral research, and all but 2 of the students reported having attended one or more conferences within two years after finishing undergraduate work.

With regard to the frequency, many reported attending 1 or 2 conferences a year on an average. Naturally, there is some variation depending, for example, on the stage of one’s doctoral project. For example, a student close to finishing his work indicated that his frequency now is “less than before, but that’s only logical when you’re working on the actual dissertation.”

Within the faculty, students are given financial support to go to conferences if their abstract is selected for the conference’s programme. Half of the students, as already indicated above, finance some of their conference visits within the framework of contract research. In addition, one student reported that he financed his conference attendance himself, which he considered ‘no problem’ since the salary is ‘so good’.

¹⁰ That is to say, belonging to the non-university part of the higher education system.

Conferences, however important, are not the only stages upon which students and also professors, for that matter, can present their work. Within the local institution, for example, there are the seminars already mentioned in Section 3 above. For research presentations, this setting generated mixed comments. On the one hand, it is very often welcomed as an *opportunity*, but, on the other, the smallness of the institution and therefore the heterogeneity of ‘audience’ are considered problematical. One student in marketing, for example, pointed out that, because of this,

one receives very few comments...for, there are only a few staff members in each field. So one has to explain the very basics of things time and time again, for the others. This is why research is generally presented elsewhere. It’s better to generate comments from colleagues directly.

Beyond the immediacy of the local faculty, 3 students reported that presentation at local ‘research centres’ or ‘research institutes’ is an option, depending on one’s subject and promoter. One student, for example, explained it as follows:

Naturally, one’s subject has to have some relationship with what people are doing in that institute, and that, in some sense at least, is coincidental. And one has to be lucky with one’s promoter in terms of his or her relationship with that institute. In some cases, I know there’s even rivalry.

In between the local and the global, many students reported attending meetings organised by sometimes field-specific professional societies. This holds especially for Flanders and Belgium. Many students reported also having attended and sometimes having presented their research at summer schools and other meetings specifically organised for doctoral students in The Netherlands. These encounters are field-specific – marketing, accounting, etc. – which was without exception perceived to have been a major advantage. The same advantage holds also for European field-specific professional institutions. Most of them organise annual conferences, which most students and professors reported attending more or less regularly. Prior to the conference, ‘doctoral colloquia’ are organised specifically for a limited number of doctoral students who present their work, which is commented upon.

4.2.3 Writing

Formal scientific communication remains an important aspect of scientific life, even though it is often the case that most of what is written up by doctoral students has been communicated to, and distributed within, scientific communities previously through research presentations and various more informal communications with fellow researchers both in face-to-face meetings and by phone, e-mail, etc. In some sense at least, the importance of formal communication, most notably in the form of the journal article or a book, lies more in the area of legitimisation and reputation. With respect to the former, many of the students used words that express the notion that formal writing is first and foremost detailed. As one student in management put it: “it is a very detailed account of what one has done in a limited area; a thorough report on the subject and on the whats, whys and hows of the work you did, and how it relates to other work done.”

With respect to the ‘reputation’ of publications, it is interesting to observe that practically every student was very much aware of the hierarchy of the journals in terms of ‘importance’, ‘status’, and so forth. This is independent of the stage of the doctoral programme they were in. Regarding this awareness, many students based their accounts on the classification of journals that a Flemish economic institution publishes, which identifies A, B, etc. journals.¹¹ They were also very much aware of the use of publication records in evaluations, and its increasing perceived importance for

¹¹ Presumably based on journal impact scores as published by the Philadelphia-based Institute of Scientific Information (ISI).

their later career. That is to say that, while a doctoral degree has become a *sine qua non* for pursuing a research career, it can no longer be viewed as sufficient. One student in finance and accounting explained that “ideally, apart from one’s dissertation, one has to be able to present one international publication in quite an important journal, and a range of ‘Belgian’ publications.” The professors also observed this trend. One professor, for example, pointed out that “what worries me is that the journals that I consider to be ‘top journals’ are not identified as such in the lists.”

The acknowledgement of the growing importance of these kinds of bibliometric classification in the area of research evaluation at different levels, however, has not as yet resulted to a sense of acute pressure to publish. One student, when reflecting upon this subject, simply pointed out that “The fact is that professors in this faculty hardly ever publish in the A journals. And if that’s the case, how can they expect doctoral students to do so?”

Apart from these ‘reputation’ considerations with respect to publishing, scientific writing, of course, is also part of a learning process. Students’ reports indicate that, again, one learns by doing and by doing it alone. In other words, scientific writing also is reported to be a highly individualised activity. This is so for nearly all the students’ written products: from the research paper stemming from the doctoral training programme, doctoral proposal, and conference papers to journal publications and the dissertation. First drafts, when wholly or partially finished,¹² are given by the doctoral students to their supervisor or supervisors for comment, which serves as an input in the revision process. Oral-research presentations, often based on one such draft, generate further comments, insights, and so on, which serve as more input in the writing and rewriting process. The search of the literature and reviews can be considered a third input in this process. One’s own research design, methodology, and findings, of course, serve as a fourth input in the writing process, although these occur primarily in relation to one or more of the other inputs. In sum, there is a lot of collective work that goes into the writing process, although the processing of this ‘collectivity’ proceeds individually. All this is, of course, an ongoing process, centred on individual doctoral students’ syntheses of what is perceived as available or usable information.

Although it is usual, as most participants indicated, to base journal articles on the dissertation, we found that half of the students had recently published in article form; i.e., before actually starting to work on the dissertation. Most often, they were rewritten conference papers. One student, for example, explained that “I didn’t have to rework the paper that much, so... it’d be stupid not to do it.”

There are further reports on students’ authorship or co-authorship of contract research reports, internal research reports, and research memoranda. In practice, then, there are many forms of training in the writing of articles, albeit most of these products will not formally count as such because, for example, they remain internal.

When compared to the writing of relatively short research statements such as articles and the like, the writing of the dissertation is something quite different, as the participants readily acknowledged.¹³ First and foremost: it is to be an individual book. That is to say, it is not a collection of earlier written and/or published research articles, as often occurs in the natural sciences.

The difference in scale is why the dissertation is often portrayed as a major individual struggle. One student, for example, said that “the dissertation can be made of hundreds of pages, consisting of a precise account of both the literature and one’s own work.” Its structure, however, may be comparable to that of the research article. It is often perceived as ‘logical’; that is, in the

¹² There is some variance here among doctoral students. This was perceived as being related to differences in supervision style among the supervisors. We will take this issue up in more detail in the section on supervision.

¹³ Note that, because of the stage of career our participants are in, we are talking about a minority of doctoral students.

words of one student, “one starts with an introduction and a review of the literature. Then one presents the research questions, methods, and the available data. Finally, one gives the data analysis, and the conclusions one can draw from it.”

While this is for the majority of participants – either prospectively or retrospectively – the case, one student pointed out that “I have divided the dissertation in three parts, with each part having that structure. Each part starts with a review of the literature because I think my subject has quite different literature areas.”

4.3 Other tasks

Only 2 students reported that they were involved significantly, in terms of time and effort, in this ‘Other category’ of doctoral students’ tasks. Both acted as student representatives in the faculty’s formal doctoral committee and had specific commitments to do so. In both cases, these were particularly related to the organisation of the doctoral training programme. One student, for example, pointed out that “I was really committed to the reorganisation of the doctoral programme; I thought the programme could, and had to be, better than it was. It was a Master’s degree such as in England that I had in mind. A lot of my proposals were accepted.” The other student explained that “it has sometimes been the case that things changed because of pressure from the doctoral students. And that is for the better.”

Of the other 8 students, one reported having done something for the library; 2 others said they had helped organise a conference.

5. SUPERVISION AND EVALUATION

We have already touched on several forms of supervision and evaluation that doctoral students encounter from the outset. Some are supervisory and evaluative events stemming from formal regulations within the institution itself. There are the application procedure, the doctoral programme, the approved research proposal, the interactions with the promoter and the jury, and the biannual evaluation of doctoral students in function of the extension of their 2-year contracts. There are also more informal forms of supervision and evaluation, such as the feedback generated within a variety of settings, such as a conference presentation or the numerous research-related conversations that one has with other researchers both inside and outside the home institution.

5.1 Supervision

More formally, doctoral students are supervised by, first, their promoter and, second, a 3-member ‘supervisory committee’ or jury, which includes the promoter. Shortly before this preliminary defence, 2 additional members are added. With the exception of the promoter, who serves as the one primarily responsible for individual supervision, both the ‘small’ and the ‘large’ committee, to use the distinction that many participants make, can perhaps best be viewed as ‘supervision at a distance’. The degree of distance varies in practice, of course, and it does so along a number of dimensions. One dimension here is the stage of the programme one is in. Most of the students and professors agreed that both of the committees function primarily on the basis of texts. In the case of the ‘large’ committee, we are talking about draft dissertation chapters. In the case of the ‘small’ committee, we have earlier versions of the chapters, research paper, and the formal doctoral proposal.

The relationship with the promoter, one’s ‘immediate supervisor’, is reported to depend, first, upon his or her perceived availability as well as his or her personal style of supervision. Second, one’s own initiative (i.e., the seeking of advice) is emphasised not only very often but also very strongly. To start with the latter: more than half of the students go so far as to argue that it depends practically entirely on their own initiative. This is so in a number of ways. In the following account,

one student not only specified what precisely is meant by that but also touched on the way in which this form of practical knowledge is picked up:

When I had just started, I shared a room with a colleague, and we had the same supervisor. I noticed that she didn't contact him, but he didn't contact her either. And I thought: "That's not going to happen to me." Whenever I've something to talk about, I'll go to him because I know he won't come to me if I don't. So that's how it works. It depends entirely on oneself. One can call him, send an e-mail, and go to him. And he sends literature references through the internal mail.

Another student, in Finance and Accounting, came rushing in for the interview, explaining that "Now was a time to talk to my supervisor, because I knew he was in. One never knows when he's in or available."

Most of the students, however, did not report any such problems. They stated that they communicate with their supervisor on frequently to very frequently. Both professors and students pointed out that day-to-day supervision is informally organised. A professor, for example, noted out that "most of the supervision is informal. That is, it takes place mostly in the corridor, when one meets the other in passing."

This 'informal' supervision by formal supervisors is also reported with regard to the construction of texts. Some doctoral students reported that one could submit unfinished texts and to talk about them, while others report that they have to take a more formal route with their supervisors. One student, in this respect, says that

I'm lucky. I can come with unfinished texts or ideas and discuss them, often immediately, so I can go on with my work. I know others who have to hand in something finished, make an appointment, and then discuss issues one or two weeks later. So I imagine that that takes more time.

5.2 Evaluation

As noted in the introduction of this section, doctoral students in the course of their projects encounter many forms of evaluation. In this subsection, we would like to focus on processes of evaluation related to the completion of the doctoral dissertation.

The writing of the individual chapters of the dissertation, like doing the research itself, is a highly individual matter, as we have seen before. Apart from the relationship with their promoter, doctoral students have a supervisory committee with 2 other members. As we have seen, there is some variation in the frequency of direct contacts with these other members. Once a draft chapter is available, the committee meets with the doctoral student to discuss its form, structure, and content. One student explained that "one hands in the text, sets up a meeting later so that members can read the text properly, and it's discussed. And naturally, one tries to respond to the comments generated in the later draft."

This happens a number of times until the committee views the total draft dissertation 'worthy enough', to use the words of one student, to be put forward for a "pre-defence". Once this is decided, 2 other members are added to the committee to form a 5-member jury, including the promoter.

The pre-defence is viewed as a trial public defence. The jury members ask questions, which the candidate answers. No one other than the jury and the doctoral student is present during this meeting. After it, the public defence is organised. In practice, there is some major or minor rewriting of the draft dissertation, depending on the results of the pre-defence. The public defence itself is often viewed as a formality, although, of course, it is an important one. There is a 20-minute presentation of the dissertation by the Candidate, followed by questions of the jury and answers from

the Candidate, for approximately an hour. After that, the public is invited to ask questions, which they do.

Based on both the dissertation and the performance of the Candidate during the public defence, the jury awards the doctoral degree. There are no reports of further distinctions that come with the degree.

6. DOCTORAL-STUDY DURATION AND JOB-MARKET PROSPECTS

As already discussed above, we can consider the formal duration of PhD programme, at least for assistants, to be 6 years. We have also seen that the actual completion time is close to 7 years. This section deals with participants' explanations regarding the difference between formal and actual duration. These explanations, without exception, combine many 'reasons for delay', some of which are individual and sometimes incidental, whereas others have to do with perceptions of the properties of the local and national systems they work in. To start with the former, the birth of a child, a death in the family, sickness, and the like are normal events of life that can be encountered in the course of the programme. This kind of thing involved, in this study, 3 of the 10 students. While often explained away as 'incidental', these events, in individual cases, are very real in their consequences.

More frequently mentioned as "factors influencing delay", then, are a variety of aspects of the organisation of doctoral students' work that we have discussed above. First, the large teaching load of most doctoral students as they perceived it is identified as one such factor. Second, the difficulty and the individuality of the process of subject choice is often mentioned. For example, one student explained that "in Flanders I would think only bursary (research council) doctoral students are able to get their degree faster, given that there is already a research proposal to work on. So they save the time that we have to invest in searching for a good subject." This participant already pointed out that the doctoral training programme itself is the cause of delay. The obligatory courses, moreover, were in a few cases mentioned as a distinct "time consumers" as well. Fourth, the supervision arrangement may explain a part of doctoral students' delays, insofar one has had to 'wait' for supervision, at least in one's perception, e.g. in terms of comments and advice by one's supervisor. In 2 cases, specifically, the 'procedural delays' between the pre-defence and the public defence were mentioned. As one student recalled,

well, after the pre-defence one rewrites bits and pieces of the dissertation, and I handed it in and I had to wait for another 6 or 8 weeks. The promoter has to distribute the text and formally has to organise the meeting. I think this could have been a lot faster. I know he is a very busy man, but still he's supervised me for over 6 years, so one would expect him to know what's in the dissertation. Another point is: there is no incentive for professors to do it more quickly, so why should they? The only people that I have seen awarded their degree relatively rapidly were people who already had a new job.

The latter point made here relates job-market prospects of doctoral students to the speed with which they finish the doctorate. In this regard, most of the students opt for an academic career, although they are aware this is not easy, given the scarcity of positions available. In regard to the home faculty, for instance, one student explains that a permanent position is "practically out of the question, unless some people start dropping dead on the floor."

In other institutions there may be more room for young doctorates, but again this is highly uncertain, and in any event beyond their control. The only opportunity, many reported, is a postdoctoral and hence temporary position.

Even though prospects in the academic world are perceived to be very few, they do strive to enter it. In fact, one student in marketing stated that

a few years ago I was planning to go work in the private economy, but I've changed my mind. I had contacted a few major marketing firms in Belgium, but I was shocked by the low quality of work. Basically, they say what companies want to hear, and they massage the research results in order to do so. And I don't want that.

In effect, then, the lack of concrete job-market prospects may cause individual doctoral students nearing the end of dissertation research to 'hang around a bit longer', to use the words of one student.

7. SUMMARY

In this study, we looked at a doctoral programme in business studies as organised and experienced by a number of participants in one faculty of one university in Flanders. Our main findings are as follows:

1. Only a small group of doctoral students are employed within the faculty and enrolled in the doctoral training programme – small, that is, when compared to the large number of undergraduate students in business studies.
2. Whereas research training is partly formalised in the form of the doctoral training programme, we found no such formalisation regarding the doctoral students' teaching obligations or their training to teach.
3. The doctoral training programme, given the smallness of the group of participants, is perceived to be very heterogeneous, although many doctoral students would prefer a higher degree of specificity in the programme.
4. Despite the formalisation of research training, studying for a PhD is still largely characterised by learning by doing, by working alone. The processes of research design, doing research, and scientific writing are highly individualised activities.
5. Supervision is often informally organised and influenced by both the initiative of the doctoral student and the supervision style of the supervising professor. This has advantages and disadvantages: the sometimes perceived lack of 'structure' in day-to-day supervision is appreciated by the doctoral students in terms of intellectual independence but is also criticised because of the perceived loss of time.
6. The duration of the doctoral programme is longer than the more or less 6 years of its formal duration; due to a perceived lack of supervision, the teaching load, the time spent on the doctoral training programme, procedural delays, and concrete job-market prospects, which are not seen as good.